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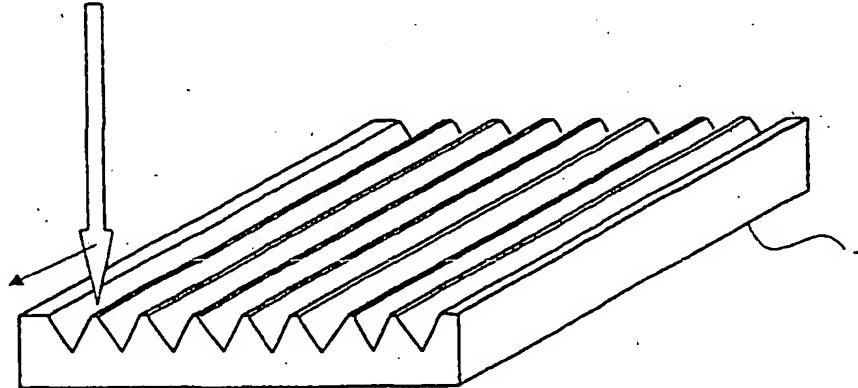
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(54) Title: FIBER ARRAY FOR OPTICAL COMMUNICATION AND METHOD OF MANUFACTURING THE FIBER ARRAY

(54) 発明の名称: 光通信用ファイバアレイおよびその製造方法

パルスレーザ光 A



A...PULSE LASER BEAM

(57) Abstract: A multicore fiber array for optical communication having a high dimensional accuracy, easily manufactured at a low cost, and capable of reducing the use amount of adhesive agent when optical fibers are fixed to a base material, comprising the base material for inserting the optical fibers therein and a retaining plate for pressingly fixing the inserted optical fibers, characterized in that the base material comprises a plurality of grooves for inserting the optical fibers therein, the accuracy of the center-to-center distances between the adjacent insert holes is within  $\pm 0.5 \mu\text{m}$ , and a parallelism between the adjacent insert holes in groove longitudinal direction is within  $\pm 0.1^\circ$ .

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/05779

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> G02B6/36

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G02B6/04-6/08, G02B6/24, G02B6/36-6/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2003  
Kokai Jitsuyo Shinan Koho 1971-2003 Jitsuyo Shinan Toroku Koho 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| Y         | JP 64-44403 A (Fujitsu Ltd.),<br>16 February, 1989 (16.02.89),<br>Page 3, upper left column, line 18 to page 3,<br>upper right column, line 4<br>(Family: none) | 1-8                   |
| Y         | JP 2002-156548 A (Kyocera Corp.),<br>31 May, 2002 (31.05.02),<br>Claim 5; Par. Nos. [0015], [0020], [0035] to<br>[0036]<br>(Family: none)                       | 1-8                   |
| Y         | JP 2002-40293 A (Kyocera Corp.),<br>06 February, 2002 (06.02.02),<br>Claims 6 to 8; Par. Nos. [0027] to [0031],<br>[0035] to [0036]<br>(Family: none)           | 1-8                   |

 Further documents are listed in the continuation of Box C.  See patent family annex.

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"&amp;" document member of the same patent family

Date of the actual completion of the international search  
29 May, 2003 (29.05.03)Date of mailing of the international search report  
10 June, 2003 (10.06.03)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

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## INTERNATIONAL SEARCH REPORT

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| Y         | EP. 760488 A1 (NGK Insulators, Ltd.),<br>05 March, 1997 (05.03.97),<br>Page 5, lines 39 to 41<br>& JP 9-120014 A & US 6027253 A | 1-8                   |